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| APPLICATION NO.       | FILING DA               | TE FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|-----------------------|-------------------------|-------------------------|-------------------------|------------------|--|
| 10/796,036            | 03/10/20                | Junichi Shinohara       | 250128US2               | 2107             |  |
| 22850                 | 7590 05/30/2006         |                         | EXAM                    | EXAMINER         |  |
| •                     | PIVAK, MCCL             | MADDEN, GRE             | MADDEN, GREGORY VINCENT |                  |  |
| 1940 DUKE<br>ALEXANDI | STREET<br>RIA, VA 22314 | ART UNIT                | PAPER NUMBER            |                  |  |
| •                     |                         |                         | 2622                    |                  |  |

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.                    | Applicant(s)                 |  |  |  |  |
|---|------------------------------------|------------------------------|--|--|--|--|
|   | 10/796,036                         | SHINOHARA, JUNICHI           |  |  |  |  |
| Office Action Summary   | Examiner                           | Art Unit                     |  |  |  |  |
|   | Gregory V. Madden                  | 2622                         |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |                                    |                              |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                    |                              |  |  |  |  |
| Status  |                                    |                              |  |  |  |  |
| 1) Responsive to communication(s) filed on 16 Se  | eptember 2005.                     |                              |  |  |  |  |
| · · · · · · · · · · · · · · · · · · ·   | action is non-final.               |                              |  |  |  |  |
| 3) Since this application is in condition for allowan   | ice except for formal matters, pro | secution as to the merits is |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |                                    |                              |  |  |  |  |
| Disposition of Claims   |                                    |                              |  |  |  |  |
| 4)⊠ Claim(s) <u>1-10</u> is/are pending in the application.   |                                    |                              |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |                                    |                              |  |  |  |  |
| 5) Claim(s) is/are allowed.   |                                    |                              |  |  |  |  |
| 6)⊠ Claim(s) <u>1-10</u> is/are rejected.   |                                    |                              |  |  |  |  |
| 7) Claim(s) is/are objected to.   |                                    |                              |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.   |                                    |                              |  |  |  |  |
| Application Papers  |                                    |                              |  |  |  |  |
| 9)⊠ The specification is objected to by the Examiner.   |                                    |                              |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>10 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.  |                                    |                              |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                                    |                              |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |                                    |                              |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |                                    |                              |  |  |  |  |
| Priority under 35 U.S.C. § 119  |                                    |                              |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:  |                                    |                              |  |  |  |  |
| 1.⊠ Certified copies of the priority documents have been received.  |                                    |                              |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |                                    |                              |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |                                    |                              |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |                                    |                              |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |                                    |                              |  |  |  |  |
|   |                                    |                              |  |  |  |  |
| Attachment(s)   |                                    |                              |  |  |  |  |
| 1) Notice of References Cited (PTO-892)   | 4) Interview Summary               |                              |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  Notice of Informal Patent Application (PTO-155)   |                                    |                              |  |  |  |  |
| Paper No(s)/Mail Date 6) Other:   |                                    |                              |  |  |  |  |

### **DETAILED ACTION**

### Petition To Make Special

Please note that the Applicant's Petition To Make Special Under MPEP 708.02(VIII), filed September 16, 2005, was granted by the Office on May 23, 2006.

# **Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

# Specification

The title of the invention is <u>not descriptive</u>. A new title is required that is clearly indicative of the invention to which the claims are directed.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

# Claims 1, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaneda et al. (U.S. Pat. 4,592,638).

First, considering **claim 1**, the Kaneda reference teaches an image inputting apparatus (camera) comprising a photographic optical system (photographic lens 1) for projecting an image of a subject, an

imaging device (image pickup tube 6) for converting the projected image into an image signal (via CCD 30) and outputting it, a focus driving device (motor drive circuit 13) which changes a focusing condition of the image projected to the imaging device by relatively moving (via distance adjustor 2) at least one of a part or an entire of the photographic optical system (lens 1) and the imaging device (image pickup tube 6) to the other. Further, Kaneda shows a first auto focusing device (passive range finder 11) which sequentially evaluates the image signal obtained in each focusing condition while subsequently changing the focusing condition by controlling the focus driving device (motor drive circuit 13), and which obtains a predetermined focusing condition based on the evaluation, a controlling device (sequencer 8) for controlling an operation of the first auto focusing device, a ranging device (active range finder 10) for measuring a subject distance, and finally the controlling device (sequencer 8) controls the operation of the first auto focusing device (passive range finder 11) according to the subject distance obtained by the ranging device (active range finder 10) to prioritize both focusing accuracy and focusing speed. Kaneda teaches these limitations in Figs. 1, 3, and 4, Col. 4, Line 26 – Col. 5, Line 2, Col. 5, Line 22 – Col. 6, Line 11, and Col. 6, Lines 43-53.

In regard to **claim 4**, the limitations of claim 1 are shown above, and the Kaneda reference further shows a second auto focusing device (active range finder 10) which obtains a predetermined focusing conditions by controlling the focus driving device (motor drive circuit 13) based on the subject distance obtained, wherein the controlling device (sequencer 8) switches over between the operation of the first auto focusing device (passive range finder 11) and the second auto focusing device (active range finder 10) according to the subject distance. Please refer to Col. 4, Lines 24-26 and Col. 6, Lines 43-53 of Kaneda.

As for claim 5, Kaneda shows the limitations of claim 4 above, and Kaneda further teaches that the controlling device (sequencer 8) switches over between the operation of the first auto focusing device (passive range finder 11) and the second auto focusing device (active range finder 10) to operate the

passive range finder when the subject distance is more than a predetermined distance (i.e. greater than 10 meters) which is set previously, and to operate the active range finder when the subject distance is less than the predetermined distance (i.e. less than 10 meters). See Col. 4, Line 24 – Col. 5, Line 2, and Col. 6, Lines 43-53.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

# Claims 2, 3, and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneda et al. (U.S. Pat. 4,592,638) in view of Nonaka (U.S. Pat. 6,366,736).

Regarding claim 2, while the Kaneda reference teaches the limitations of claim 1 above, and while Kaneda does show that the wideness and narrowness of the focusing range can be set by the user (see Table 2 in Col. 8), Kaneda fails to show that the controlling device controls the first auto focusing device so as to carry out the evaluation in a peripheral focusing range of a focusing condition which corresponds to the subject distance measured by the ranging device, and sets a wideness and a narrowness of the peripheral focusing range in accordance with the subject distance. However, the Nonaka reference teaches a camera having a first and second auto focusing device (passive and active-type AF, respectively) wherein the first auto focusing device (passive AF 40) is controlled to carry out the evaluation in a peripheral focusing range of a focusing condition which corresponds to the subject distance measured. Further, a wideness and a narrowness of the peripheral focusing range are set in accordance with the subject distance (See Nonaka Fig. 3A, and Col. 5 Line 60 – Col. 7, Line 26). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have

incorporated the setting of the peripheral focusing range, as taught by Nonaka, with the focusing control of Kaneda. One would have been motivated to do so because, as Nonaka shows in Col. 7, Lines 11-17, there are times when the subject that the user wants to focus on is not at the center of the capture area, and therefore it is advantageous to perform focusing based on peripheral areas of the scene using the distances measured to determine an in-focus condition as well as the need for a particular wideness or narrowness setting.

In regard to **claim 3**, Kaneda in view of Nonaka teaches the limitations of claim 2 above, and the Nonaka reference further shows that the controlling device (CPU 10) sets the peripheral focusing range wider when the subject distance is more than a previously set predetermined distance as compared with a case that the subject distance is less than the predetermined distance. Nonaka teaches these limitations in Fig. 3A and Col. 6, Line 46 – Col. 7, Line 17.

Next, considering **claim 6**, again the Kaneda reference teaches the limitations of claim 1 above, but Kaneda does not specifically teach that the ranging device measures the distance to each area of a plurality of different areas of the subject, respectively, and that the controlling device controls the operation of the first auto focusing device based on the plurality of distances to each area obtained by the ranging device. However, the Nonaka reference teaches that the ranging device (passive AF) measures a distance to each area of a plurality of different areas of the subject (as shown in Figs. 1B and 3C), respectively, and the controlling device (CPU 10) controls the operation of the first auto focusing device (passive type AF) based on a plurality of distances to each area obtained by the ranging device. Please refer to Col. 6, Lines 23-29 and Col. 8, Lines 6-38.

As for claim 7, the limitations of claim 6 are taught above, and the Nonaka reference further shows that the controlling device (CPU 10) controls the first auto focusing device (passive type AF) so as to carry out the evaluation in a peripheral focusing range of a focusing condition which corresponds to the subject distance obtained by the ranging device, and sets a wideness and a narrowness of the peripheral

focusing range pursuant to the presence or absence of the subject (i.e. a person or a tree) which is mixed with a long distance and a short distance that is based on the distance to each area. Nonaka teaches these limitations again in Col. 8, Lines 6-38.

Regarding claim 8, the limitations of claim 7 are taught above by Nonaka, and Nonaka teaches that the controlling device (CPU 10) sets the peripheral focusing range wider when the subject is not in a condition mixed with the long distance and short distance (i.e. in the presence of trees) compared with a case that the subject is in the condition mixed with the long distance and the short distance. Please refer to Col. 7, Lines 18-52.

In regard to **claim 9**, Kaneda in view of Nonaka teaches the limitations of claim 6 above, and Nonaka further that the image inputting apparatus further comprises a second auto focusing device (active-type AF 30) which obtains a focusing condition by controlling the focus driving device (focus controlling part 12) based on the subject distance obtained by the ranging device, wherein the controlling device (CPU 10) switches over between the operation of the first auto focusing device (passive-type AF 40) and an operation of the second auto focusing device (active-type AF 30) corresponding to a presence or an absence of the subject which is mixed with a long distance and a short distance that is based on the distance to each area. Please refer to Fig. 1A and Col. 7, Lines 1-52.

Finally, in regard to **claim 10**, the limitations of claim 9 are taught above, and the Nonaka reference shows that the controlling device (CPU 10) switches over between the operations of the first auto focusing device (passive-type AF 40) and the operation of the second auto focusing device (active-type AF 30) to operate the first auto focusing device (40) when the subject is not in a condition mixed with the long distance and the short distance and to operate the second auto focusing device when the subject is in the condition mixed with the long distance and the short distance (i.e. the active type AF is operated when there are multiple objects in the image capture area, for example trees and buildings,

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whereas passive type AF is operated when only a single object with an indistinct background is in the

image capture area). Please refer to Col. 8, Lines 6-38.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Nonaka (U.S. Pat. 6,507,707)

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Gregory V. Madden whose telephone number is 571-272-8128. The examiner can

normally be reached on Mon.-Fri. 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc

Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer

Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR

CANADA) or 571-272-1000.

Gregory Madden May 23, 2006

SUPERVISORY PATENT EXAMINER

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